

A Basic Biosecurity Model For Aquaculture Sites

Facility Grounds

1. Post sign explaining the rules of your site
2. Post sign about your biosecurity plan and disease control efforts.
3. Maintain premises in a clean manner.
4. No pets or livestock allowed on site.
5. Provide for control of rodents and other pests.
6. Fence facility and use locked gates.
7. Enclose or fence water supply.
8. Periodically check water quality and maintain in good condition.
9. Keep water supply free of fish or use double screens to keep them out of your facility.
10. Cover runs with bird netting where practical.
11. Replace dirt runs with cement, if desirable.
12. Do not allow free public access to sensitive areas. Restrict public and their vehicles to designated areas and have them pass through a controlled area, such as a booth or manned gate. All visitors should be escorted around the property.
13. Notify UDAF of any unusual occurrences such as flooding, large numbers of escapees, high death losses, etc.
14. Leaflets on pathogens and diseases need to be distributed or made available to the public.

Management Practices

1. Have trained personnel assigned to important duties. This assures accurate completion on a continual basis.
2. Provide workers with clean and usable outer garments, gloves, boots, etc.
3. Stock all facilities at the optimum level. This prevents overcrowding as fish grow and allows for best production.
4. Avoid overcrowding and other stressful situations which may precipitate disease outbreak.
5. Take fish off feed for 1-2 days prior to and after handling, grading, shipping, etc.
6. Assure all incoming fish are from properly inspected and health approved sources. This is required by state law.
7. Attend to youngest fish first and handle diseased fish last.
8. Give proper amounts of feed to reduce waste and optimize growth.
9. Feed by hand to attain more even distribution of feed and to better observe fish for health and behavior changes.
10. Remove and dispose of mortalities on a daily basis. Bury with quick lime or burn. If fish are captured for eating, place the remains from cleaning, filleting, and deboning in a pit with quick lime or burn.
11. Keep records of the number of daily mortalities. This may indicate the beginning of a disease outbreak.
12. Use appropriate vaccines where possible.
13. Provide and use disinfecting foot baths and hand washes.
14. Provide a secure and appropriately maintained storage area for feed. Protect feed from birds, pests, and excessive heat.
15. Clean raceways, runs, screens, and hatchery areas daily.

16. Provide double screens at the lower end of every run, raceway, or pond.
17. Disinfect runs and raceways between each lot of fish, if possible.
18. Maintain quiescent zones and sediment settling areas free of fish.
19. Do not drive your vehicle onto or visit any neighboring facilities known to be infected with fish pathogens. If this is necessary, then wash your vehicle and remove any mud or infected water from yourself before returning to your clean facility.

Equipment

1. Maintain a separate set of equipment such as nets, waders, crowders, etc. for each site. ~~Don't~~ use equipment between sites.
2. Store all equipment in a clean, well maintained area away from pests.
3. Clean and disinfect equipment daily or immediately after each use.
4. Require any public equipment, such as vehicles, waders, boots, nets, etc., be disinfected as they enter and as they leave premises.
5. Sanitize all vehicles before they enter the premises after entering a site endemic to prohibited pathogens.

Steps to take if an infection occurs

1. Contact the UDAF Fish Health Program personnel for advise or assistance.
2. Depending on the pathogen involved, either restrict movement of the fish until they can be utilized or destroy and dispose of the fish.
3. Thoroughly clean and disinfect all troughs, runs, equipment, vehicles.
4. Consider replacing dirt runs with cement.
5. After appropriate disinfection time, restock with a small number of fish and have them inspected for the pathogen, as appropriate.
6. A change in operation style or a different species may be necessary.
7. May resume normal operation after meeting any legal health requirements or after being assured that the disease is halted.